

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR2003/002188

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7 H04B 7/26

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 H04B 7/02, H04B 7/08

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
KR, JP as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
PY	KR 2003-17946 A ( SAMSUNG ELECTRONICS CO. LTD. ) 04 MARCH 2003 (04.03.2003) see the whole documents	1 - 27
PY	KR 2003-33601 A ( SAMSUNG ELECTRONICS CO. LTD. ) 01 MAY 2003 (01.05.2003) see the whole documents	1, 20
A	KR 2001-95535 A ( SAMSUNG ELECTRONICS CO. LTD. ) 07 NOVEMBER 2001 (07.11.2001) see the detailed description	1, 20
A	US 5,548,834 A ( BRUNO PL SUARD ) 20 AUGUST 1996 (20.09.1996) see the claims and fig. 3	1, 20

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance  
"E" earlier application or patent but published on or after the international filing date  
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)  
"O" document referring to an oral disclosure, use, exhibition or other means  
"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art  
"&" document member of the same patent family

Date of the actual completion of the international search

20 JANUARY 2004 (20.01.2004)

Date of mailing of the international search report

20 JANUARY 2004 (20.01.2004)

Name and mailing address of the ISA/KR



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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR2003/002188

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
KR 2003-17946 A	04.03.2003	NONE	
KR 2003-33601 A	01.05.2003	NONE	
KR 2001-95535 A	07.11.2001	NONE	
US 5,548,834 A	20.09.1996	EP0639897A1 CN1117677A DE69331140D1 DE69331140T2 EP0639897A1 ES2164062T3 JP7154864A US5548834A	22.02.1995 28.02.1996 20.12.2001 04.07.2002 22.02.1995 16.02.2002 16.06.1995 20.08.1996